

What Is Claimed Is:

1. A network bridge, in particular for coupling serial IEEE 1394 buses, comprising:  
means (MK) for configuration and control of the network bridge (NB), access being provided, via interfaces (I), to some or all functional blocks (T, F, RM, RE, PC) of the network bridge for the polling and evaluation of useful data, operating data, and/or parameters, and for manipulation of those data and/or parameters, and thus of the functional blocks, on the basis of the evaluation.
2. The network bridge as recited in Claim 1, wherein the means (MK) for configuring and controlling the network bridge are made up of a software layer within the network bridge architecture.
3. The network bridge as recited in Claim 1 or 2, wherein in addition to the functional blocks of the network bridge according to IEEE 1394, routing maps (RM) and a routing unit (RE) are provided for each connectable bus, information about the topology and node addresses in the respective connectable buses or networks (N1, N2) being providable in the routing maps (RM), and data being exchangeable via the routing unit (RE) between a link or transaction layer according to IEEE 1394.1 and a network bridge temporary memory (F).
4. The network bridge as recited in one of Claims 1 through 3, wherein provision is made for a configuration of resources, in particular of memory capacity and/or line capacity, as a function of the varying operating parameters.
5. The network bridge as recited in Claim 4, wherein provision is made for an allocation of memory regions, in particular for the temporary memory (F) for the data to be transported via the network bridge, on the basis of a statistical evaluation of the data volume for different data types such as asynchronous and isochronous data.
6. The network bridge as recited in one of Claims 1 through 5, wherein in the event of a defect in a connected bus or network, or an attack by unauthorized persons, the transfer of data is haltable, or the relevant bus or a connected device is deactivatable.

7. The network bridge as recited in one of Claims 2 through 6, wherein above the software layer (MK) for configuration and control, at least one further software layer is provided via which a network operator or user can control functions of the network bridge.